LAPTEV, Dmitriy Martem'yanovich; SHVARTSMAN, L.A., prof., retsenzent

[Problems and exercises on the thermodynamics of solutions] Zadachi i uprazhneniia po termodinamike rastvorov. Moskva, Metallurgiia, 1965. 218 p. (MIRA 18:7)

ALEKSEYEV, V.I. (Moskva); SHVARTSMAN, L.A. (Moskva)

Investigating the thermodynamics of the formation of mixed iron - chromium carbides of the type $(Fe_xCr_y)_{23}C_6$. Izv. AN SSSR. Met. no.1:173-179 Ja-F '65. (MIRA 18:5)

L 49285-65 EWT(m)/EWP(z)/EWA (c)/EWP(b)/T/EWP(t) Pad IJP(c) JD/HW

ACCESSION NR: AP5011529 UR/0020/65/161/005/1073/1076

28
23
B

AUTHOR: Itkin, V. P.; Mogutnov, B. M.; Shvartsman, L. A.

TITLE: Heat transformations of iron-nickel martensite

SOURCE: AN SSSR. Doklady, v. 161, no. 5, 1965, 1073-1076

TOPIC TAGS: iron alloy, nickel containing alloy, aluminum containing alloy, titanium containing alloy, alloy aging, iron nickel martensite, martensite aging

ABSTRACT: The aging of martensite in 1) Fe + 7.75% Ni, 2) Fe + 7.75% Ni + 1.5% Al, 3) Fe + 7.70% Ni + 1.0% Ti, and 4) Fe + 7.75% Ni + 1.45% Al + 1.75% Ti alloys has been investigated at temperatures up to 600—700C. No phase transformations (e.g., precipitation of new phases) were observed in alloy 1. However, exothermic processes caused by precipitation of certain new phases (i.e., by aging) were observed in alloys 2, 3, and 4. The "apparent" specific heat curve of Fe-Ni-Al alloy exhibited two minima (at 405 and 495C), indicating at least two stages of aging. The heat evolution in aging at temperatures up to 500C was 15 j/g, of which 5.4 j/g occurred during the first stage. Aging of Fe-Ni-Ti alloy proceeded in three stages, at 370, 510, and 575C. The calculated heat effect for aging at temperatures up to 675C was 31.4 j/g to 2.1, 9.2, and 20.1 j/g during the first, second, and third stage,

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L 49285-65

ACCESSION NR: AP5011529

5

respectively. The aging of Fe-Ni-Al-Ti alloy was similar to that of the Fe-Ni-Al alloy; the heat effect for aging at temperatures up to 550C was 36.4 j/g, of which 10.5 j/g occurred during the first stage. Thus, aging of iron-nickel martensite is a complex multistage process. The calculated values of heat effects for aging with formation of intermetallic compounds agreed closely with the experimental values. This indicates that the aging of iron-nickel martensite is accompanied by precipitation of various nickel-base intermetallic compounds. Orig. art. has: 2 figures and 1 table. [MS]

ASSOCIATION: Institut metallovedeniya i fiziki metallov Tsentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii im. I. P. Bardina (Institute of Metal Science and the Physics of Metals, Central Scientific Research Institute of Ferrous Metallurgy)

SUBMITTED: 26Oct64 ENCL: 00 SUB CODE: MM

NO REF SOV: 005 OTHER: 005 ATD PRESS: 4005

[redacted]

BJG

Card 2/2

L 1353-66 EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5021936 UR/0126/65/020/002/0251/0257 41 39 B
66.017/019

AUTHOR: Surovoy, Yu. N.; Shvartsman, L. A.; Alekseyev, V. I.

TITLE: Nature of chemical bonding in the carbides and nitrides of transition metals

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 2, 1965, 251-257

TOPIC TAGS: chemical bonding, transition metal carbide, transition metal nitride, valence electron, heat of atomization, bonding electron, bonding orbit, internal electron

ABSTRACT: On the basis of the theory that, during the formation of the metalloid compound, the valence electrons of the atoms of both components migrate to the d-level of the metal atoms, relations are derived between the heats of atomization of the carbides and nitrides of Ti and Cr and the effective charges of the atomic nuclei. Thus, it is concluded that chemical bonding in the carbides and nitrides of the transition metals is based on the d-band of the transition metals, which accepts the p-electrons of carbon or nitrogen. This bonding may to a large extent

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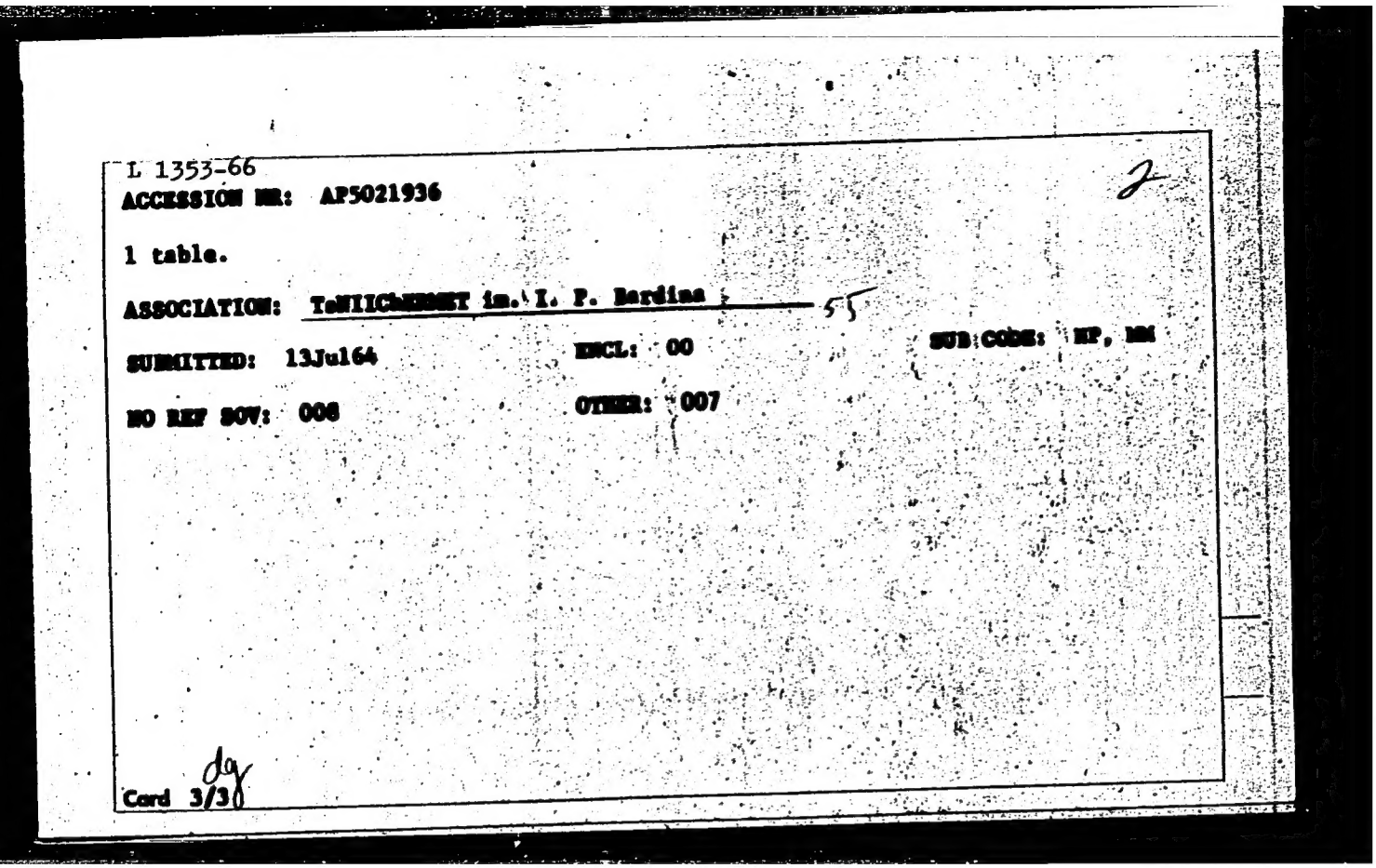
L 1353-66 0

ACCESSION NR: AP5021936

have the properties of a metallic bonding but at the same time it is distinguished by the property of saturability: along with the bonding orbits, if the number of electrons in the compound exceeds a certain level, there appear orbits which weaken the bonding. The presence of bonding orbits conditions a definite proportion of covalence and the attendant properties: hardness, chemical inertia, etc. The strength of bonding, given an equal number of electrons, is determined by the electrostatic interaction between d-, s-, and p-electrons and the nuclei of the metal and metalloid, on taking into account the shielding effect of the internal electrons; the weaker this electrostatic attraction is, the stronger is the bonding in the compound. The strongest bonding in the carbides, nitrides, and borides of the transition metals is observed in cases where there are 5.5-6.5 electrons per metal atom; it is exactly in these cases that the melting points of such compounds are the highest (upward of 2600°C) and they are the most heat-resistant. This is exemplified by the case of titanium carbide: The electronic structure of Ti is $3d^2 4s^2$ (beyond the argon shell), and that of C, $1s^2 2s^2 2p^2$. Total number of bonding electrons: two 3d- and two 4s-electrons from Ti, minus 0.5 electron departing for the conductivity band, plus two 2p-electrons from C. Thus, the sum total of the electrons considered is 5.5. Orig. art. has:

Card 2/3



L 1353-66
ACCESSION NR: AP5021936

1 table.

ASSOCIATION: Tekhnicheskiy im. I. P. Bardina

SUBMITTED: 13Jul64 ENCL: 00 SUB CODE: MP, MM

NO REF SOV: 008 OTHER: 007

Card 3/3

ACC NR: AP6036719 SOURCE CODE: UR/0119/66/000/011/0025/0027

AUTHOR: Varlamov, G. K. (Engineer); Makarov, A. I. (Engineer); Nikolayev, S. A. (Engineer); Polevaya, Zh. A. (Engineer); Shvartsman, L. D. (Engineer)

ORG: none

TITLE: Investigating reliability of USEPPA discrete elements

SOURCE: Priborostroyeniye, no. 11, 1966, 25-27

TOPIC TAGS: pneumatic control element, pneumatic control system / USEPPA pneumatic control system

ABSTRACT: The preliminary results are reported of an investigation of reliability of USEPPA pneumatic-control elements fabricated by the Ust'-Kamenogorsk Instrument Plant. Lack of time and continuous modernization of

Card 1/2 UDC: 62.525"401.7"

ACC NR: AP6036719

elements did not permit conducting a thorough investigation. Tests in "yes-no" circuits were conducted at frequencies up to 2.5 cps (some up to 10 cps), at 25C and 40—70% humidity; the elements were regarded as nonrepairable equipment; supply pressure, 1—4 kg/cm ; twelve different types of elements were tested. The values of the mean time to failure are tabulated. It was found that: (1) Relay-type elements have a least reliability in the 2.5—5-cps range; (2) The mean time to failure for diaphragm- and shutter-type elements has the same order of magnitude and is practically independent of their circuits; (3) The use of a supply pressure of 1 kg/cm^2, instead of 1.4 kg/cm^2, increases the reliability of the elements tenfold; (4) Generally, the failures were caused by wear, and their distribution seems to obey the normal law. Details of tests and hints for modernization are discussed. Orig. art. has: 4 figures, 4 formulas, and 1 table.

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 002

Card 2/2

SHVARTSMAN, L. G.

"An Investigation of the Operation of Cascade Generators in Steady-State Operation and During Disruptions of the Stationary State." Cand Tech Sci, All-Union Order of Lenin Electrical Engineering Inst imeni I. V. Lenin, 14 Dec 54. (VM, 3 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: SUM No. 556, 24 Jun 55

SHVARTSMAN, L.I.(Zlatoust)

Visual aid for the study of trigonometry. Mat. v shkole no. 4:61-62 Jl-Ag '58. (MIRA 11:7)

(Trigonometry--Study and teaching)

SHVARTSMAN, L.I. (g.Zlatoust, Chelyabinskoy oblasti)

An appliance for drawing charts. Politekh.obuch. no.6:88-89 Je '59. (MIRA 12:12)
(Charts)

SHVARTSMAN, L.M.

Pneumatic transportation of cotton components in cotton-harvesting machines. Izv. AN Uz. SSR. Ser. fiz.-mat.nauk no.4:77-83 '58. (MIRA 11:11)

1. Institut matematiki i mekhaniki AN Uz. SSR.
(Cotton-picking machinery)

ISMAILOV, M.I.; SHVARTSMAN, L.M.

Measuring the velocity and turbulent pulsations by means of a device equipped with a capacitor. Izv. AN Uz.SSR. Ser. fiz.-mat. nauk no.2:51-55 '58. (MIRA 11:10)

1. Institut matematiki i mekhaniki imeni V.I. Romanovskogo.
(Aerodynamic measurements)

SHVARTSMAN, L.M.

Turbulence determination in air flows. Dokl. AN Uz. SSR no.6:11-14 '58. (MIRA 11:9)

1.Institut matematiki i mekhaniki im. V.I. Romanovskogo AN UzSSR. Predstavleno akademikom AN UzSSR Kh.A. Rakhmatullinym.
(Pneumatic-tube transportation--Fluid dynamics)
(Turbulence)

10(3),10(7) SOV/166-59-2-10/11

AUTHOR: Shvartsman, L.M.

TITLE: Investigation of Turbulent Pulsations of the Air Flow With Semiconductor-Heat-Resistances (Issledovaniye turbulentnykh pul'satsiy vozdushnogo potoka poluprovodnikovymi termosoprotivleniyami)

PERIODICAL: Izvestiya Akademii nauk Uzbekskoy SSR, Seriya fiziko-matematicheskikh nauk, 1959, Nr 2, pp 83-87 (USSR)

ABSTRACT: The author describes a thermistor used for the investigation of turbulent pulsations of the air flows. The apparatus is heated by electric current and simultaneously it is cooled by the air flow. The use bases on the connection between the heat emission of the apparatus and the velocity of the air flow. The given scheme contains two milliammeter, 2 resistances, 1 bifurcation, 1 voltmeter, 1 electronic voltage stabilizer, 1 switch, and 1 oscillograph. The measurements were carried out in air ducts; the size of the apparatus is so small that even the turbulence inside of the boundary layer can be measured.
There are 4 figures and 2 Soviet references.

ASSOCIATION: Institut matematiki i mekhaniki AN UzSSR (Institute of Mathematics and Mechanics AS Uz.SSR)

SUBMITTED: October 25, 1958

Card 1/1

SHVARTSMAN, L.M.

Movement of cotton components in a pneumatic tube. Dokl.AN Uz.SSR no.5:16-19 '59. (MIRA 12:8)

1. Institut matematiki im. V.I.Romanovskogo AN UzSSR. Predstavleno akademikom AN UzSSR Kh.A.Rakhmatullinym.
(Cotton) (Pneumatic-tube transportation)

SHVARTSMAN, L.M.; KOBYAKOV, O.S.; KOSTIN, Yu.P.

Checkrowing with an automatic electronic device. Izv. AN Uz.SSR.Ser.tekh.nauk. no.3:68-70 '60. (MIRA 13:7)

1. Institut mekhaniki AN UzSSR.
(Sowing) (Automatic control)

SHVARTSMAN, L.N.

Energy of the base state of an electron impurity center in an ionic crystal as a function of the chemical nature of the impurity. Izv.Sib.otd.AN SSSR no.5:51-58 '60. (MIRA 13:7)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR.
(Ionic crystals)

SHVARTSMAN, L.Sh.

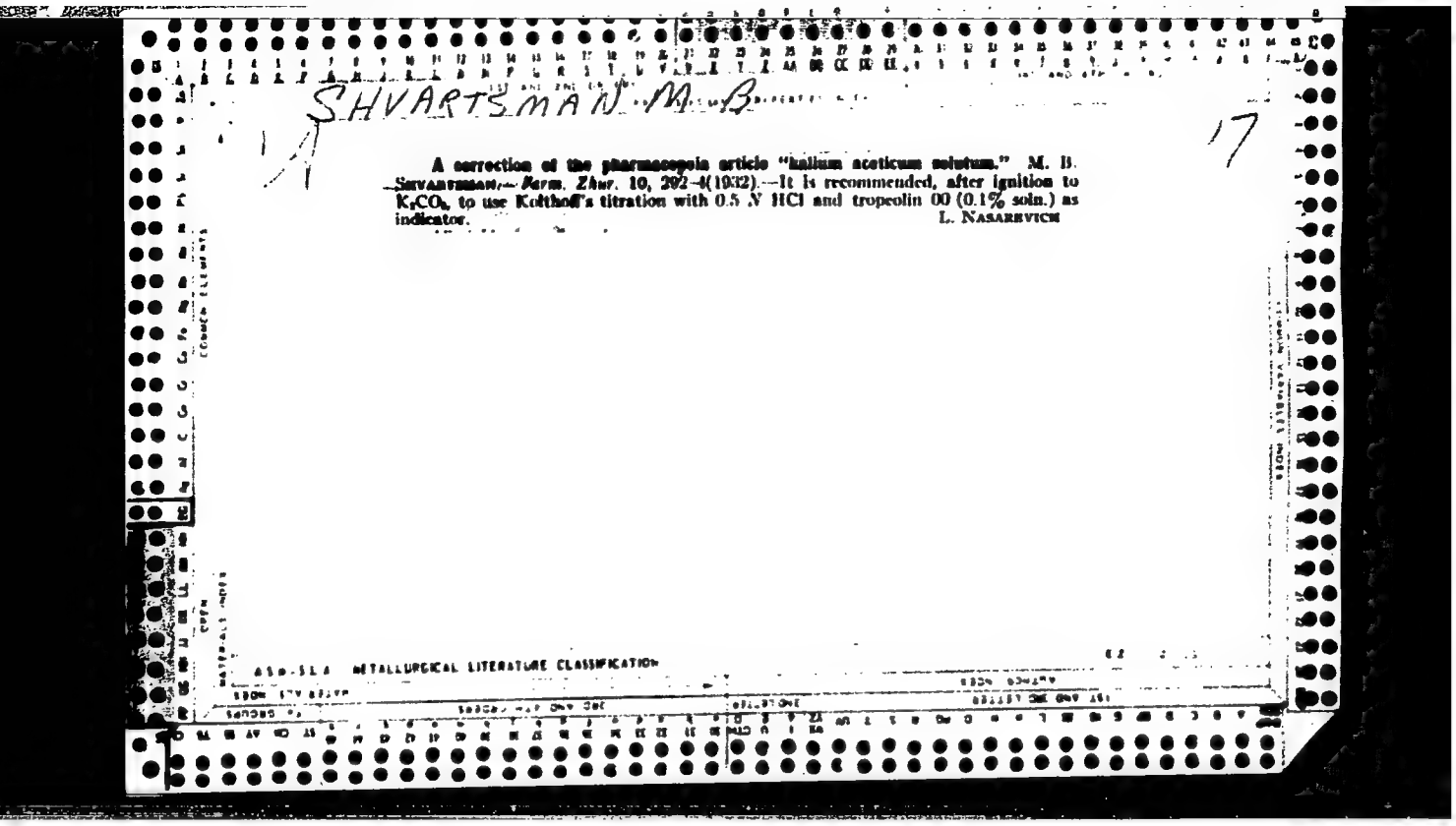
How the running speed of planting machinery affects the accuracy of checkrowing cotton. Trakt. i sel'khozmash. no.3:21-24 Mr '59. (MIRA 12:4)

1. Sredneaziatskiy nauchno-issledovatel'skiy institut mekhanizatsii i elektrifikatsii oroshayemogo zemledeliya.
(Planters (Agricultural machinery))

BOGUSH, V.K., prof.; SHVARTSMAN, I.Ya.

Proteolytic enzymes in the clinical aspects of surgical pulmonary tuberculosis. Probl. tub. no.1:17-21 '55.
(MIRA 13:12)

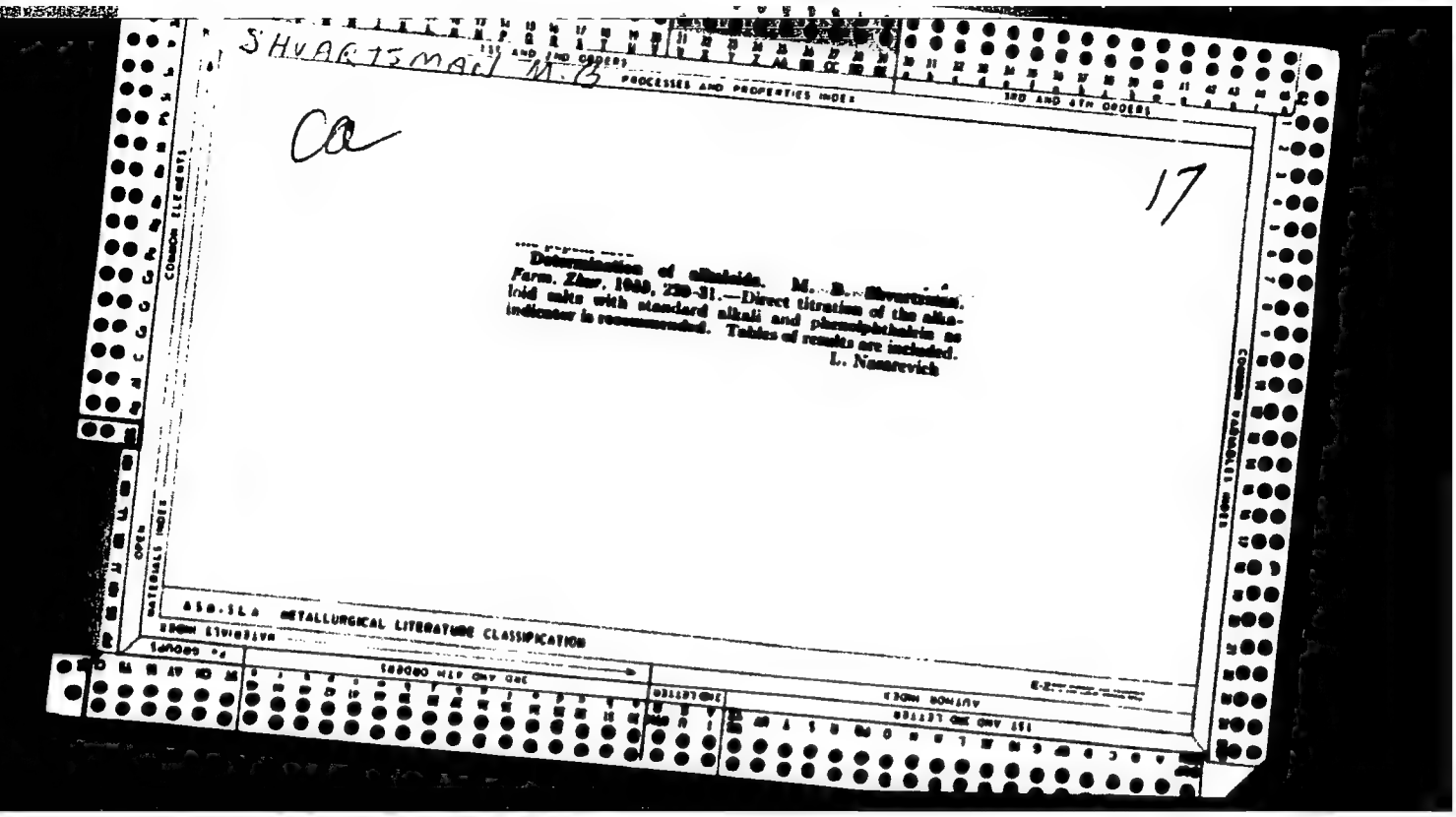
1. Kafedra khirurgii legochnogo tuberkuleza TSentral'nogo instituta usovershenstvovaniya vrachey, otdeleniya torakal'noy khirurgii protivotuberkuleznoy bol'nitsy (nachal'nik V.I. Robak) L'vovskoy zheleznoy dorogi. 2. Deystvitel'nyy chlen AMN SSSR (for Bogush).

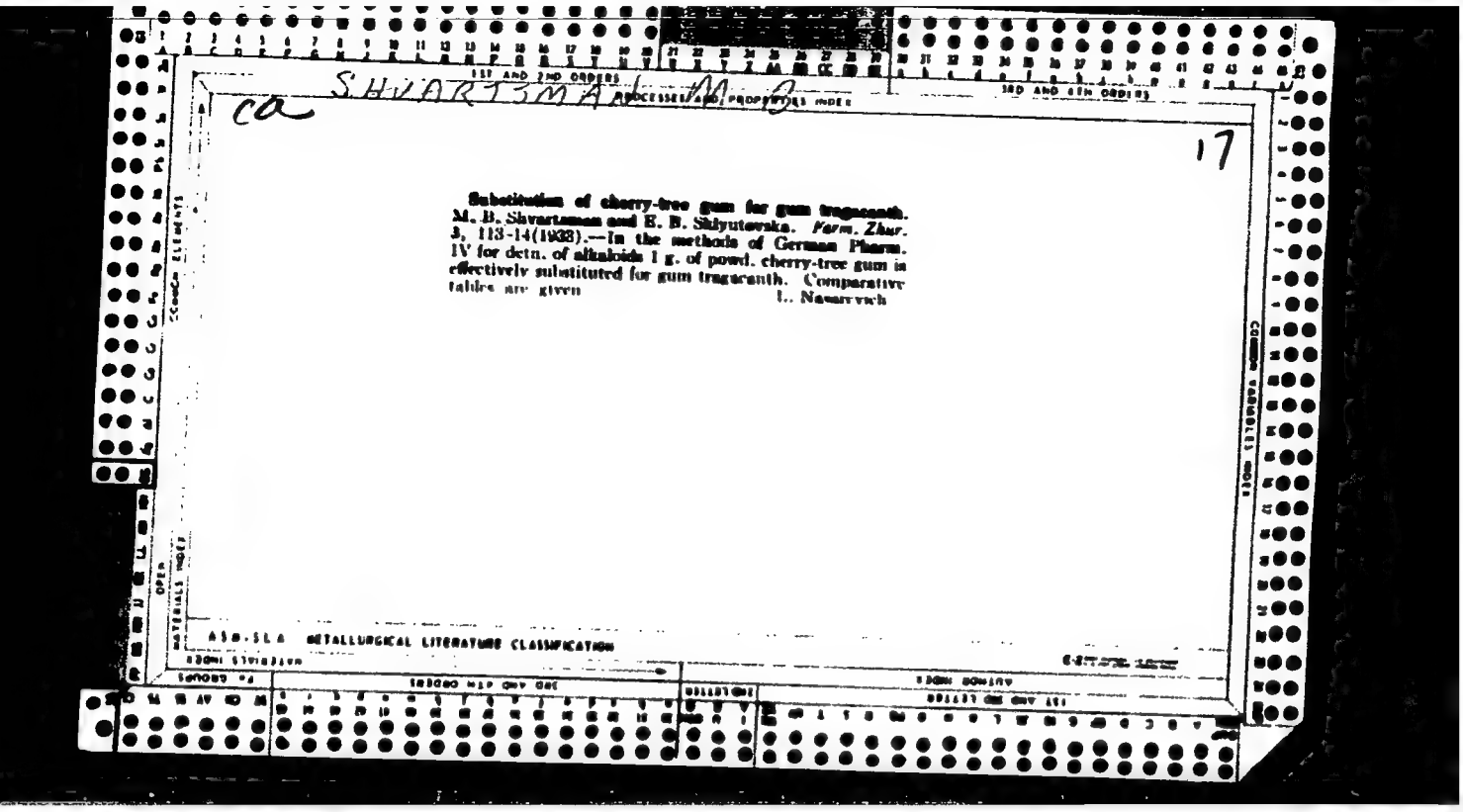


SHVARTSMAN, M. B.

17

A correction of the pharmacopoia article "kalium aceticum solutum." M. B. Shvartsman.—*Farm. Zhur.* 10, 292–4(1932).—It is recommended, after ignition to K_2CO_3, to use Kolthoff's titration with 0.5 *N* HCl and tropeolin 00 (0.1% soln.) as indicator.
L. NASAREVICH



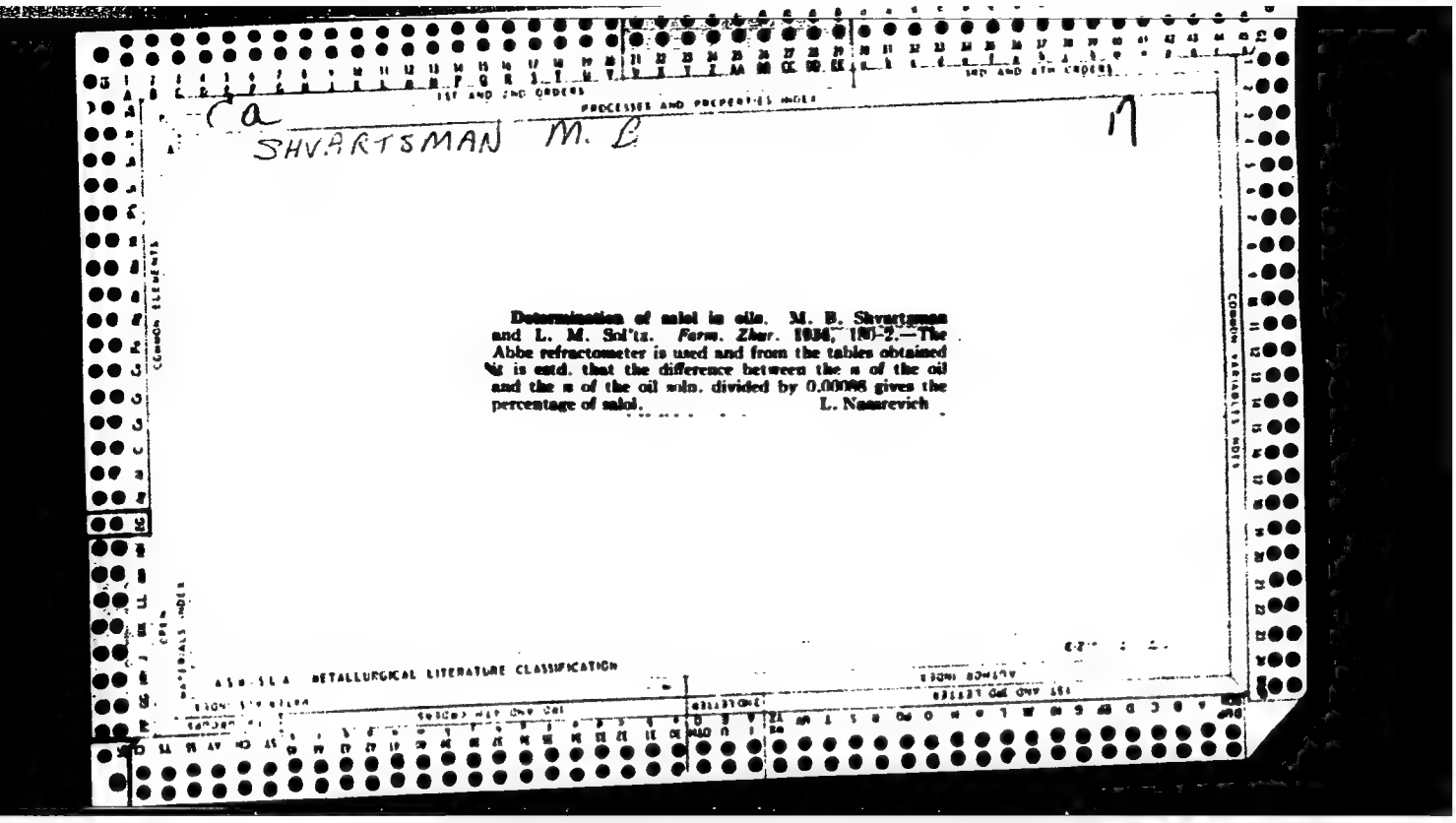


ca SHVARTSMAN M. B.

17

Substitution of cherry-tree gum for gum tragacanth. M. B. Shvartsman and E. B. Shlyutovska. *Farm. Zhur.* 3, 113-14(1933).—In the methods of German Pharm. IV for detn. of alkaloids 1 g. of powd. cherry-tree gum is effectively substituted for gum tragacanth. Comparative tables are given
L. Navarrvch

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



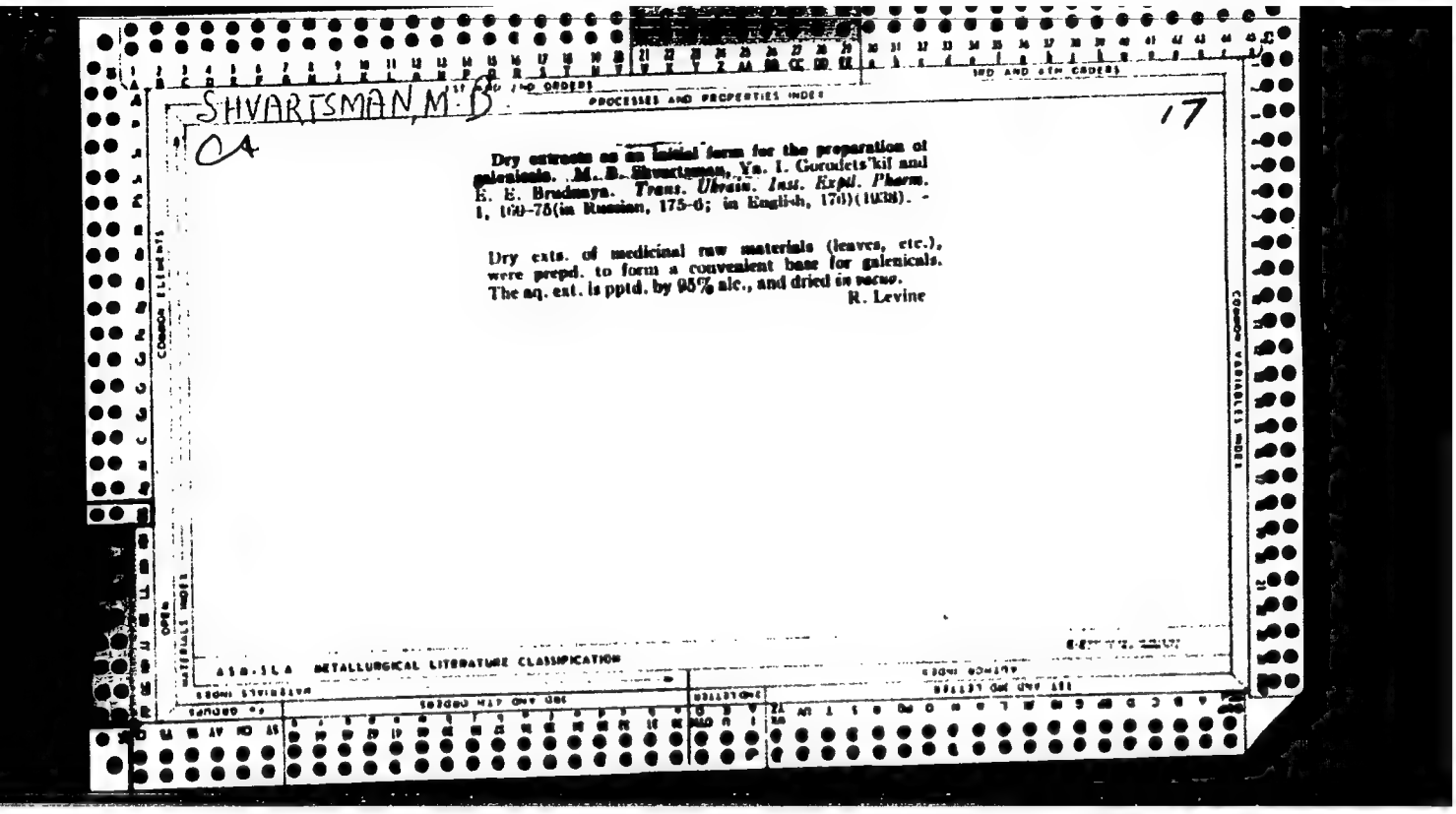
Ca

SHVARTSMAN M. B

11

Determination of salol in oils. M. B. Shvartsman and L. M. Sol'ts. *Farm. Zhur.* 1936, 181–2.—The Abbe refractometer is used and from the tables obtained % is estd. that the difference between the *n* of the oil and the *n* of the oil soln. divided by 0.00098 gives the percentage of salol. L. Naumevich

ASTIA METALLURGICAL LITERATURE CLASSIFICATION



SHVARTSMAN, M. B.

CA

17

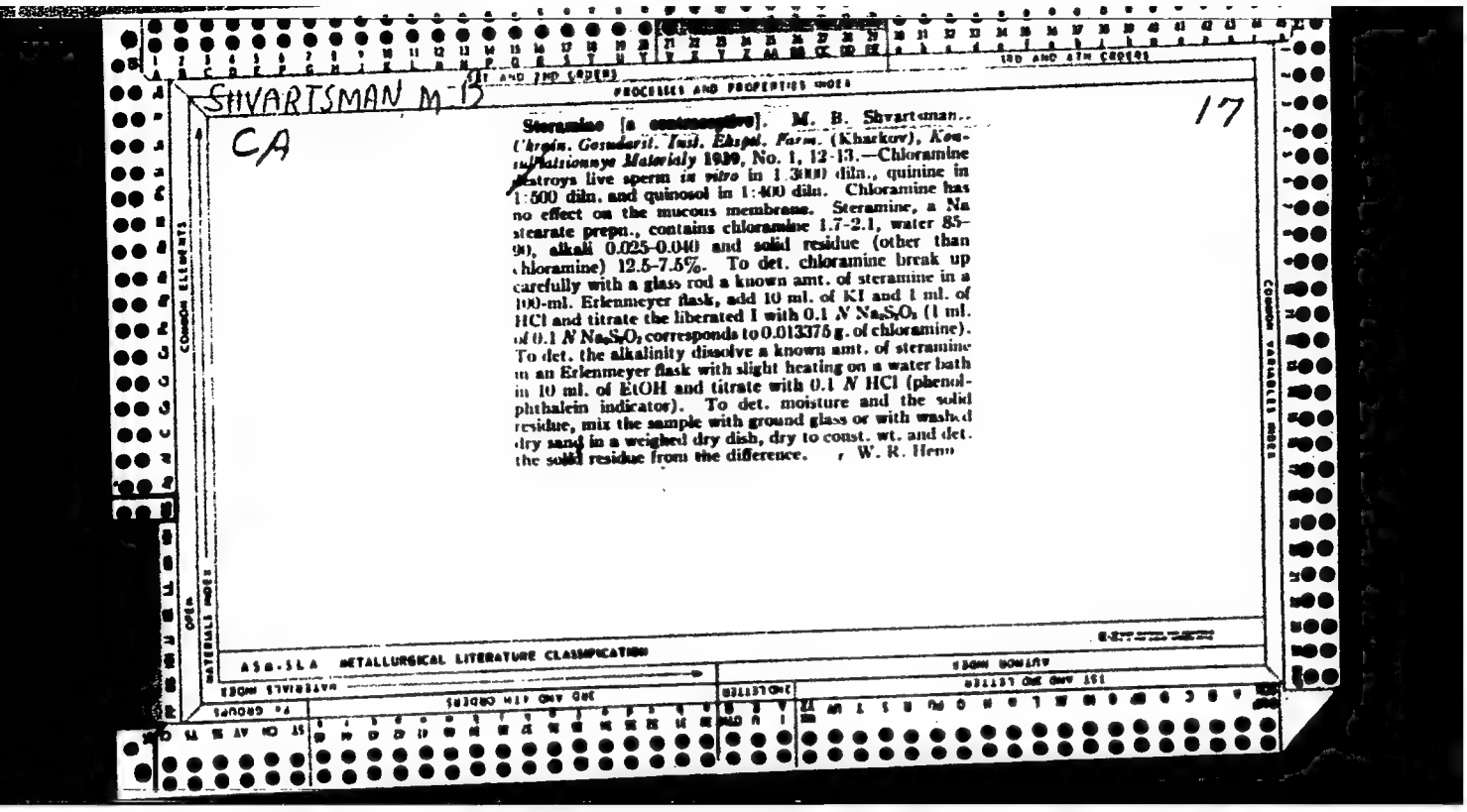
PROCESSES AND PROPERTIES INDEX

Dry extracts as an initial form for the preparation of galenicals. M. B. Shvartsman, Ya. I. Gorodets'kil and E. E. Brudnaya. *Trans. Ukrain. Inst. Expil. Pharm.* 1, 169–75(in Russian, 175–6; in English, 176)(1938). -

Dry exts. of medicinal raw materials (leaves, etc.), were prepd. to form a convenient base for galenicals. The aq. ext. is pptd. by 95% alc., and dried in vacuo.

R. Levine

A58.1L A METALLURGICAL LITERATURE CLASSIFICATION

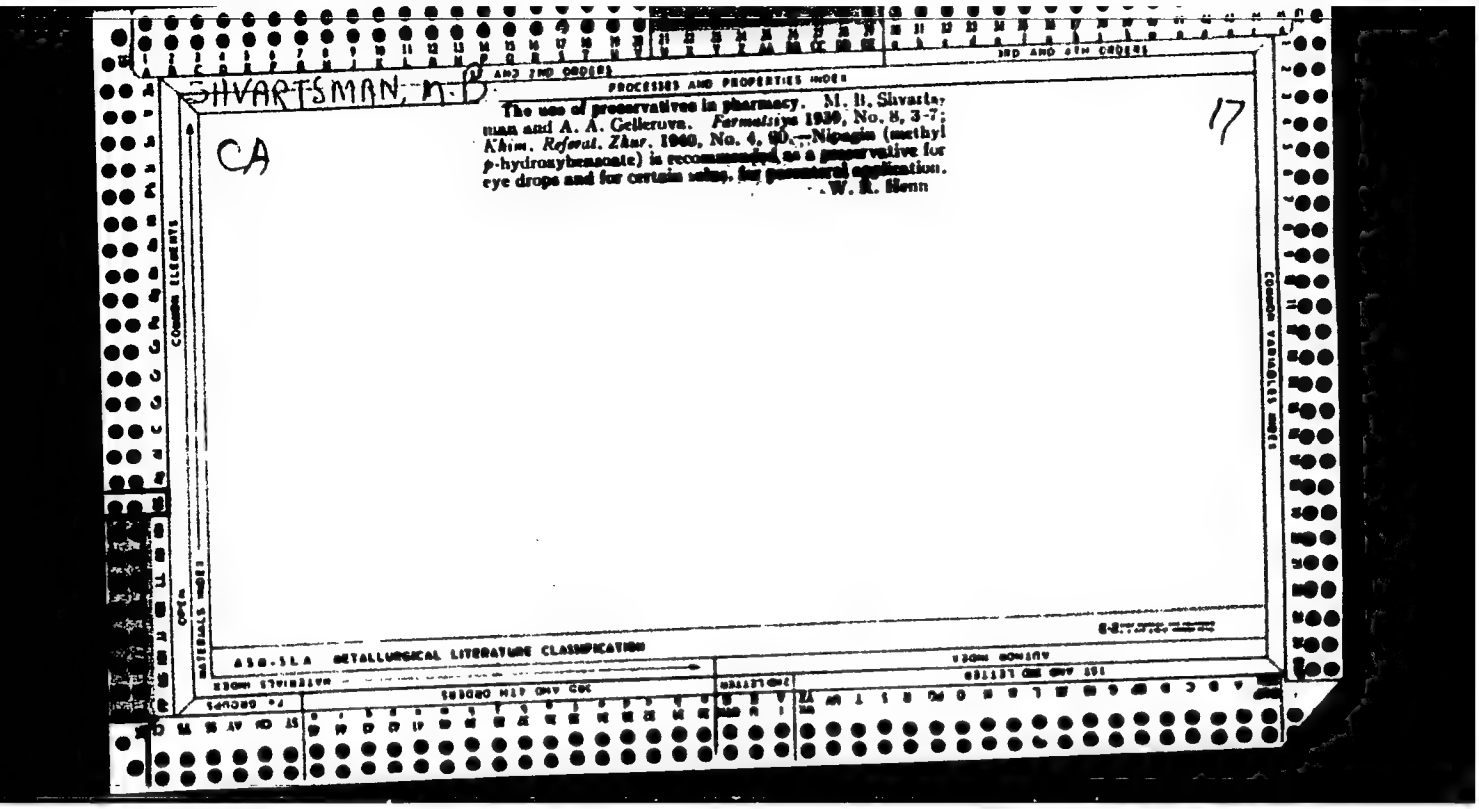


SHVARTSMAN M-B

CA

17

Steramine [a contraceptive]. M. B. Shvartsman. *Ukrain. Gosudarst. Inst. Eksptl. Farm.* (Kharkov), *Kosulfatsionnye Materialy* **1939**, No. 1, 12–13.—Chloramine destroys live sperm *in vitro* in 1:3000 dilu., quinine in 1:500 dilu. and quinosol in 1:400 dilu. Chloramine has no effect on the mucous membrane. Steramine, a Na stearate prepn., contains chloramine 1.7–2.1, water 85–90, alkali 0.025–0.040 and solid residue (other than chloramine) 12.5–7.5%. To det. chloramine break up carefully with a glass rod a known amt. of steramine in a 100-ml. Erlenmeyer flask, add 10 ml. of KI and 1 ml. of HCl and titrate the liberated I with 0.1 *N* $Na_2S_2O_3$ (1 ml. of 0.1 *N* $Na_2S_2O_3$ corresponds to 0.013375 g. of chloramine). To det. the alkalinity dissolve a known amt. of steramine in an Erlenmeyer flask with slight heating on a water bath in 10 ml. of EtOH and titrate with 0.1 *N* HCl (phenolphthalein indicator). To det. moisture and the solid residue, mix the sample with ground glass or with washed dry sand in a weighed dry dish, dry to const. wt. and det. the solid residue from the difference. — W. R. Heno



SHVARTSMAN, M. D.

CA

17

The use of preservatives in pharmacy. M. B. Shvartsman and A. A. Gellerova. *Farmatsiya* 1939, No. 8, 3-7; *Khim. Referat. Zhur.* 1940, No. 4, 80.—Nipagin (methyl *p*-hydroxybenzoate) is recommended as a preservative for eye drops and for certain solns. for parenteral application.
W. R. Henn

ASTAKHOVA, Zhanna Aleksandrovna; TSIPIS, Yuzef Mironovich; SHVARTSMAN, Moisey Borisovich; FILOGRIYEVSKAYA, Z.D., red.; MARTSEVICH, Yu.P., red. izd-va; KOZLENKOVA, Ye.I., tekhn. red.

[Procurement of medicinal and industrial raw materials in the Ukraine] Zagotovka lekarstvenno-tekhnicheskogo syr'ia na Ukraine. Moskva, Izd-vo TSentrosoiuza, 1960. 23 p. (MIRA 14:10)
(UKRAINE—BOTANY, MEDICAL)

VENDEL'SHTEYN, B.Yu.; BUKANOVA, M.G.; GORBENKO, A.S.; ISHMETOV, M.G.; SKIBITSKAYA, N.A.; MANCHEVA, N.V.; SHVARTSMAN, M.D.; DAKHNOV, V.N., doktor geol.-miner. nauk, prof., red.; KUZ'MINA, N.N., ved. red.; POLOSINA, A.S., tekhn. red.

[Album of nomograms and charts for interpreting the data of geophysical methods for studying wells] Al'bom nomogramm i paletok dlia interpretatsii dannykh geofizicheskikh metodov issledovaniia skvazhin. Pod red. V.N.Dakhnova. Moskva, Gostoptekhizdat, 1963. 61 p. (MIRA 16:11)
(Prospecting--Geophysical methods)

SHVARTSMAN, M.I.

Improving the state and operation of measuring equipment. (MIRA 14:5)
Izm.tekh. no.5:61-62 My '61.
(Measuring instruments)

L 20785-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL/ASD(a)-5/SSD/
SSD(c)/ASD(m)-3/AFETR/ESD(t) RM/WW S/0190/64/006/008/1487/1492
ACCESSION NR: AP5003799

AUTHOR: Klabunovskiy, Ye. I.; Petrov, Yu. I.; Shvartsman, M. I. B

TITLE: Optically active polymers based on esters of methacrylic and itaconic acids

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 6, no. 8, 1964, 1487-1492

TOPIC TAGS: ester, macromolecular chemistry, polymerization, optic property, optic method

ABSTRACT: Optically active polymers: (+)-poly-2-methylbutylmethacrylate, (-)-polymethylmethacrylate, and (+)-poly-di-(2-methylbutyl) itaconate were synthesized by the polymerization of the corresponding optically active esters of methacrylic and itaconic acids. The optically active polymers were synthesized by free-radical polymerization (catalyzed by benzoyl peroxide), anionic polymerization (catalyzed by phenylmagnesium bromide), and thermal polymerization (by heating to 200°). Their properties (softening point, specific rotation, and intrinsic viscosity) were investigated. The polarometric method was shown to be suitable for the study of

Card 1/2

L 20785-65

ACCESSION NR: AP5003799

polymerization kinetics, using the polymerization of (+)-2-methylbutyl methacrylate as an example. Relationships were found between the specific rotation and the time, degree of polymerization, and molecular weight. Orig. art. has: 1 formula, 4 graphs, 1 table.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR (Institute of Organic Chemistry, AN SSSR)

SUBMITTED: 030ct63 ENCL: 00 SUB CODE: OC, OP

NO REF SOV: 003 OTHER: 018 JPRS

Card 2/2

KLABUNOVSKIY, Ye.I.; [illegible], M.I., PETROV, Yu.I.

Application of optical rotatory dispersion in the study of the structure of optically active polymers. Vysokom.soed. 6 no.9:1579-1584 S '64. (MIRA 17:10)

1. Institut organicheskoy khimii imeni Zelinskogo.

SHVARTSMAN, M.I.

Cuality control of production. Standartizatsiia 28 no.8:44-45 Ag '64. (MIRA 17:11)

318

AUTHOR: Shvartsman, M.L., Engineer, Khabarovsk Engineering Works imeni L.M. Kaganovich.

TITLE: A novelty in the technology of machining the separating faces of turbine frame parts. (Novoye v tekhnologii obrabotki ploskostey raz'emov korpusnykh detaley turbin.)

PERIODICAL: "Energomashinostroenie" (Power machinery construction), 1957, No. 5, p. 31, (U.S.S.R.)

ABSTRACT: In machining the separating faces of turbine frame parts a good surface finish and a high accuracy are required. In the Khabarovsk Engineering Works these requirements were formerly met by hand scraping. Then scraping was replaced by grinding using a special grinding head on a milling machine. At the beginning of 1956 an attempt was made simply to cut these surfaces with a wide tool. This was unsuccessful mainly because the lathe could not give cutting speeds lower than five metres per minute or greater than 70 metres per minute. However, a young machine operator, G.E. Namakonov, has succeeded in machining the surfaces of twenty different kinds of parts on a large boring mill. The productivity is twice as great as with grinding. The finishing cut is made with a depth of 0.1 - 0.2 mm with a feed of 0.25 - 0.4 mm per rev depending on the dimension and shape of the parts. The cutting speed varied from 100 - 300 metres per minute. The design of cutting tool and other similar features are discussed. The complication and expense of equipping a planing machine for grinding and the difficulty of obtaining suitable grinding

MASTYUKOVA, Yu.N.; SARAYEVA, N.T.; KAZACHENKO, N.F.; YAROSLAVSKAYA, N.V.; RAYKHSHTADT, G.N.; SHVARTSMAN, M.N.

Studies on results of smallpox vaccination. Vop.virus. 6 no.2: 189-196 Mr-Ap '61. (MIRA 14:6)

1. Moskovskiy institut epidemiologii, mikrobiologii i gigiyeny i sanitarno-epidemiologicheskaya stantsiya Sverdlovskogo rayona Moskvy.

(SMALLPOX)

MASTYUKOVA, Yu.N.; SARAYEVA, N.T.; KOZACHENKO, N.F.; YAROSLAVSKAYA, N.V.; RAYKHSHTADT, G.N.; SHVARTSMAN, M.N.

Study of the results of smallpox vaccination. Report No.2. Vop. virus. 6 no.5:573-576 S-O '61. (MIRA 15:1)

1. Moskovskiy institut epidemiologii, mikrobiologii i gigiyeny i sanitarno-epidemiologicheskaya stantsiya Sverdlovskogo rayona Moskvy. (SMALLPOX)

SHVARTSMAN, M.S., ordinator

Use of nitroenamel in manufacturing facings. Stomatologiia 35 no.1:55 Ja-F '56. (MLRA 9:6)

1. Iz kafedry khirurgicheskoy stomatologii (zaveduyushchiy professor A.I.Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta (direktor dotsent G.N.Beletskiy)
(DENTAL PROSTHESIS)

SHVARTSMAN, M.S., ordinator

Fixation of prosthesis in the case of a unilateral defect of teeth. Stomatologiia 36 no.4:73 Jl-Ag '57. (MIRA 10:11)

1. Iz kafedry khirurgicheskoy stomatologii (zav. - prof. A.I. Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dotsent G.N.Beletskiy)
(DENTAL PROSTHESIS)

SHVARTSMAN, M.S.

Use of wire bone sutures for securing splinters in fractures of the lower jaw. Stomatologiia 37 no.2:21-24 Mr-Ap '58. (MIRA 11:5)

1. Iz kafedry khirurgicheskoy stomatologii (zav.-prof. A.I. Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir.-dotsent G.M. Beletskiy)
(JAWS--FRACTURE)

YERMOLAYEV, I.I., aspirant; SHVARTSMAN, M.S., ordinator

Use of a hemostatic sponge in hemorrhage from the hole left by an extracted tooth. Stomatologiia 37 no.2:64-65 Mr-Ap '58. (MIRA 11:5)

1. Iz kafedry khirurgicheskoy stomatologii (zav.-prof. A.I. Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir.-dotsent G.N. Beletskiy)

(TEETH--EXTRACTION)

SHVARTSMAN, M. S., Candidate Med Sci (diss) -- "Osteosynthesis with a wire suture in breaks of the lower jaw". Moscow, 1959. 12 pp (Min Health RSFSR, Moscow Med Stomatological Inst), 200 copies (KL, No 23, 1959, 174)

SHVARTSMAN, M.S.

Experimental basis for the use of bone sutures in fractures of the mandible. Stomatologiia 38 no.1:59-62 Ja-F '59. (MIRA 12:3)

1. Iz kafedry khirurgicheskoy stomatologii (zav. - prof. A.I. Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dots. G.M. Beletskiy).
(JAWS--FRACTURE)

YERMOLAYEV, I.I.; SHVARTSMAN, M.S.

Temporary fixation of the eyeball using a plastic pellet.
Stomatologiia 41 no.4:90-91 Jl-Ag '62. (MIRA 15:9)

1. [illegible] (EYE—SURGERY)

BOGATYREV, V.A.; Meder, V.A.; SHVARTSMAN, M.S.

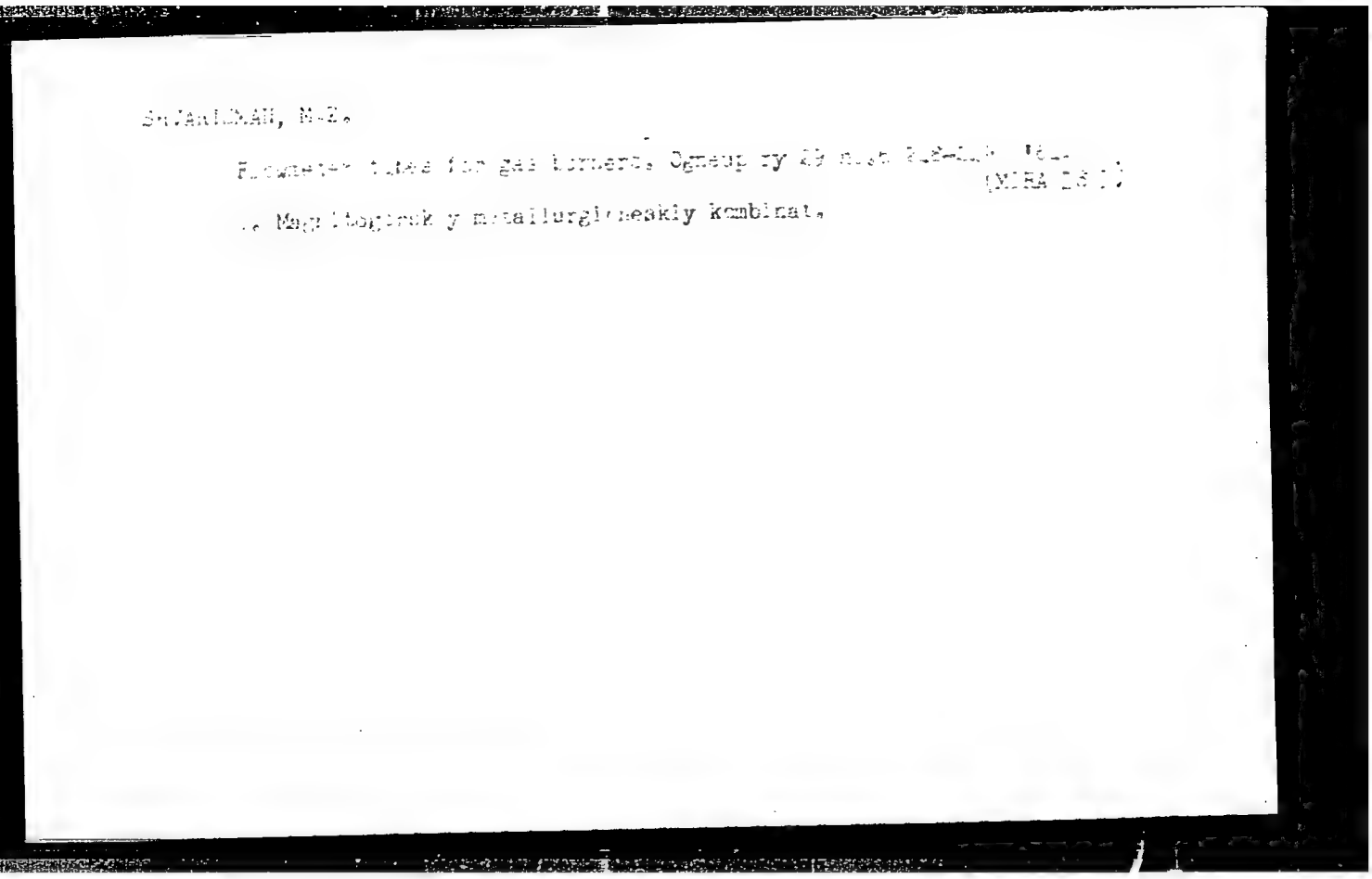
Using net charts in the construction of chemical plants. Prom. stroi. 42 no.2:6-10 '65. (MIRA 18:4)

1. Khimicheskiy kombinat "Luganskkhimstroy" (for Bogatyrev, Meder). 2. Nauchno-issledovatel'skiy institut stroitel'nogo proizvodstva Gosstroya UkrSSR (for Shvartsman).

SHVARTSMAN, M.S., inzh.

Some conclusions from the experience in applying network scheduling to construction projects in the Ukrainian S.S.R. Prom. stroi. 43 no. 11:4-6 '65. (MIRA 18:12)

1. Nauchno-issledovatel'skiy institut stroitel'nogo proizvodstva Gosstroya UkrSSR.



SHVARTSMAN, M.Z.

Flowmeter tubes for gas burners. Ogneup. 27 no.6 [illegible] '62. (MIRA 15:7)

1. Magnitogorskiy metallurgicheskiy kombinat.

SHVARTSMAN, M.Z., inzh.

Counterflow chamber tunnel drier with an air barrier. Ogneupory 18 no.8:375-381 '53. (MIRA 11:10)

1.Magnitogorskiy metallurgicheskiy kombinat.
(Drying apparatus)

SHVARTSMAN, M.Z.

Improving the design of the furnace shaft of a drying cylinder.
Ogneupory 26 no.5:240-241 '61. (MIRA 14:6)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Kilns)

SHVARTSMAN, M.Z.

Measuring consumption by the mean value of dynamic pressure.
Izm. tekh. no.11:54-55 N '64. (MIRA 18:3)

PIMENOVA, M.N.; POLYANSKAYA, G.G.; SHVARTSMAN, P. Ya.; YANUSH, I.M.

Study of the mutagenic action of a medium containing ethyleni-
mine on Drosophila larvae. Vest. LGU 19 no.21:153-155 '64
(MIRA 18:1)

L 19824-65 EWT(1)/EPR/EWA(m)-2/EWA(h) Ps-4/Peb AEDC(b)/AFTC(p) WW

ACCESSION NR: AP5001035 S/0115/64/000/011/0054/0055

AUTHOR: Shvartsman, M. Z.

TITLE: Measuring rate-of-flow by the average value of dynamic pressure

SOURCE: Izmeritel'naya tekhnika, no. 11, 1964, 54-55

TOPIC TAGS: flow meter, gas flow meter

ABSTRACT: A method for measuring gas or air flow in short (2--3 m) straight pipes of any size is described. Applicable to combustion measurements, etc., the method is based on measuring the arithmetic mean value of the dynamic pressure by a special flat twin tube with nozzles. The tube measures both static and dynamic pressures by means of a micromanometer. Formulas for correction factors are supplied. Orig. art. has: 2 figures and 4 formulas.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: IE NO REF SOV: 000 OTHER: 000

Card 1/1

AUTHORS: Nudel'man, A.A., and Shvartsman, P.A. SOV/42-13-6-13/33

TITLE: On the Spectrum of the Product of Unitary Matrices (O spektre proizvedeniya unitarnykh matrits)

PERIODICAL: Uspekhi matematicheskikh nauk, 1958, Vol 13, Nr 6, pp 111-117 (USSR)

ABSTRACT: The authors investigate the eigenvalues $\nu_k = e^{i\omega_k}$, $0 \leq \omega_k < 2\pi$, $\omega_1 \geq \omega_2 \geq \cdots \geq \omega_n$ of the matrices $C = AB$, where A and B are arbitrary unitary matrices with given eigenvalues:

$A \sim \lambda_k = e^{i\varphi_k}$, $0 \leq \varphi_k < 2\pi$, $\varphi_1 \geq \varphi_2 \geq \cdots \geq \varphi_n$

$B \sim \mu_k = e^{i\psi_k}$, $0 \leq \psi_k < 2\pi$, $\psi_1 \geq \psi_2 \geq \cdots \geq \psi_n$.

Under the assumption $(\varphi_1 + \psi_1) - (\varphi_n + \psi_n) < 2\pi$ it holds: The set of the points $(\omega_1, \omega_2, \ldots, \omega_n)$ is contained in the intersection L of minimal closed convex bodies which contain the points

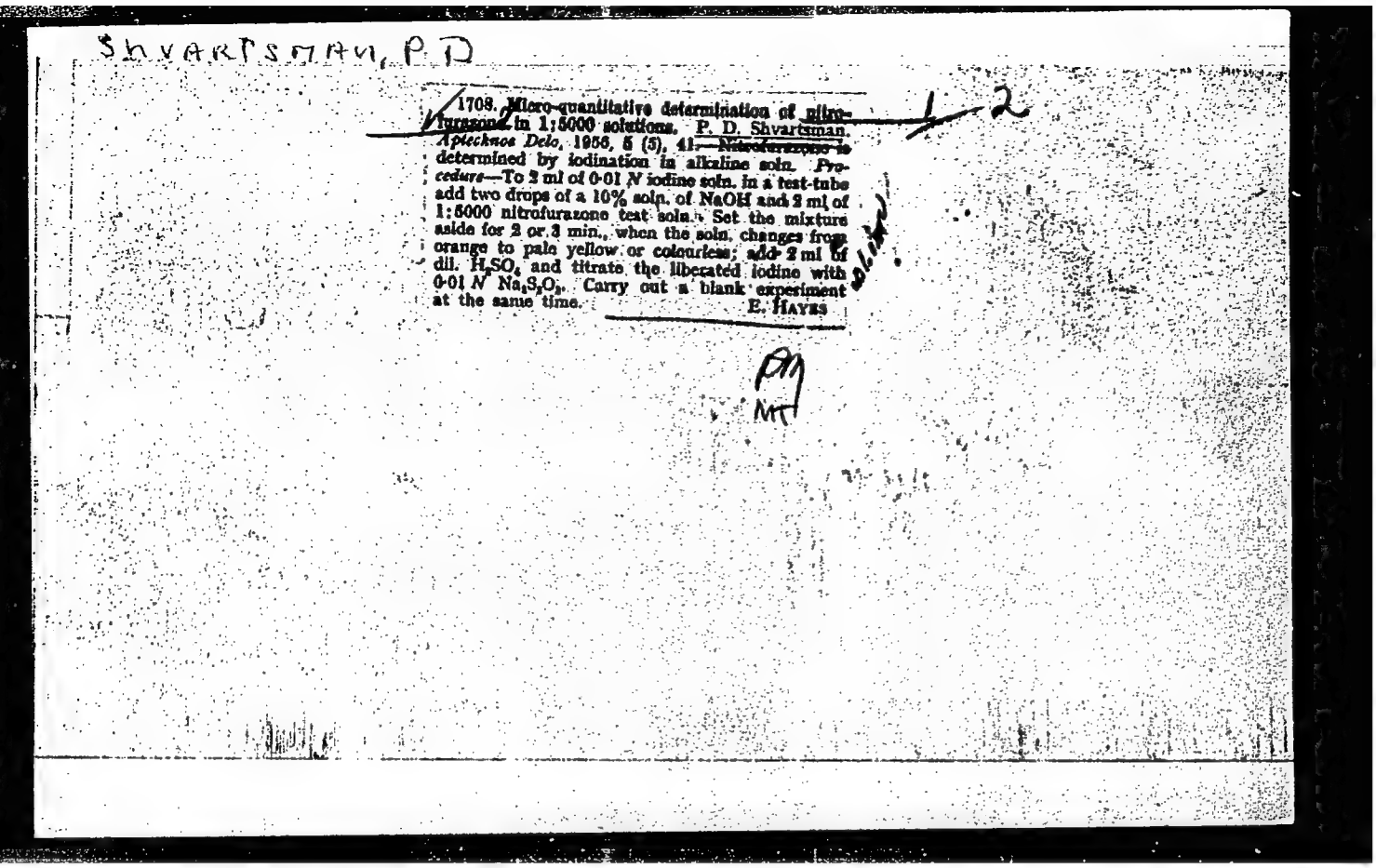
$(\varphi_1 + \psi_{k_1}, \varphi_2 + \psi_{k_2}, \ldots, \varphi_n + \psi_{k_n})$ (first body)

$(\psi_1 + \varphi_{k_1}, \psi_2 + \varphi_{k_2}, \ldots, \psi_n + \varphi_{k_n})$ (second body),

Card 1/2

where $k_1,k_2,\ldots,k_n$ are all possible permutations of the indices $1,2,\ldots,n$. Furthermore the authors introduce local coordinates of the matrices C and the derivatives of the ω_k with respect to these coordinates are calculated. The authors thank M.G.Kreyn for the assistance.
There are 2 Soviet references.

SUBMITTED: March 20, 1957



Shvartsman, P D

1708. Micro-quantitative determination of nitrofurazone in 1:5000 solutions. P. D. Shvartsman. *Aptechnoe Delo*, 1956, 5 (5), 41. ~~Nitrofurazone is~~ determined by iodination in alkaline soln. *Procedure*—To 2 ml of 0·01 *N* iodine soln. in a test-tube add two drops of a 10% soln. of NaOH and 2 ml of 1:5000 nitrofurazone test soln. Set the mixture aside for 2 or 3 min., when the soln. changes from orange to pale yellow or colourless; add 2 ml of dil. H_2SO_4 and titrate the liberated iodine with 0·01 *N* $Na_2S_2O_3$. Carry out a blank experiment at the same time. E. Hayes

SHVARTSMAN, P.D.

New qualitative reaction for dicaine. Farmatsev. zhur. 16 no.1:64 '61. (MIRA 17:8)

1. Kamenets-Podol'skaya kontrol'no-analiticheskaya laboratoriya.

SHVARTSMAN, P.D.; SKAL'T, B.I.

Alkalimetric method of quantitative determination of methionine. Apt. delo 12 no.6:63 N-D '63. (MIRA 17:2)

1. Kamenets-Podol'skaya kontrol'no-analiticheskaya laboratoriya.

S/262/62/000/015/005/011
I007/I207

AUTHORS: Potemkina, A. M., Shvartsman, P. I. and Muslin, E. S.

TITLE: On the failure of turbine discs when operating at a "reverse" temperature gradient

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no. 15, 1962, 30, abstract 42.15.184 (In collection Teplovyye napryazheniya v elementakh turbomashin, Kiev, AS UkrSSR, no. 1, 1961, 150–155)

TEXT: The analysis of turbine disc operation at "reverse" temperature gradients, shows that the stressed state of the turbine disc periphery under such conditions is liable to cause disc failure. Reliable operation of turbine discs in mobile turbine plants requires a more detailed study of the effect of temperature gradients on the carrying capacity of discs under cycling working conditions and stress concentrations.

[Abstracter's note: Complete translation.]

√c

Card 1/1

APOSTOLOV, B.G., dotsent; SHVARTSMAN, S.G.

Corticosteroids in therapy of the nephrotic syndrome in children. Uch. zap. Stavr. gos. med. inst. 12:365-366 '63.

Effectiveness of modern methods of treating leukemia in children. Ibid.:369-370 (MIRA 17:9)

1. Kafedra detskikh bolezney (zav. dotsent B.G. Apostolov) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

APOSTOLOV, B.G., dotsent; PETROVA, Z.S.; MAKHLINOVSKIY, L.I.; ZAKOTIN, Ye.S.; SHVARTSMAN, S.G.

Current clinical and epidemiological characteristics of dysentery in young children. Uch. zap. Stavr. gos. med. inst. 12:373-374 '63. (MIRA 17:9)

1. Stavropol'skiy nauchno-issledovatel'skiy institut vaktsin i syvorotok (dir. dotsent V.M. Kruglikov) i kafedra detskikh bolezney (zav. dotsent B.G. Apostolov) Stavropol'skogo gosudarstvennogo meditsinskogo instituta (rektor prof. B.G. Budylin).

BALANDIN, A.D.; STEPANOVA, V.K.; SHVARTSMAN, S.G.

Three cases of nodular periarteritis. Uch. zap. Stavr. gos. med. inst. 12:402-403 '63. (MIRA 17:9)

1. Kafedra patologicheskoy anatomii (zav. kafedroy dotsent K.I. Savvina) i kafedra detskikh bolezney (zav. kafedroy dotsent B.G. Apostolov) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

SHVARTSMAN, S.L.

The OS-312 unit for rubber facing of metallic cord. Biul. tekh.-ekon.inform. no.6:18-19 '61. (MIRA 14:6)
(Rubber coating)

SHVARTSMAN, Samuil Mironovich; LAZAREV, Yu.G., redaktor; SOBOLEVA, Ye.M., tekhnicheskiy redaktor

[Calculation of the strength of boiler apparatus elements] Raschet prochnosti elementov kotel'nykh agregatov. Moskva, Gos. energ. izd-vo, 1957. 268 p. (MIRA 10:7)
(Boilers)

SHEYNMAN, Yevgeniy Vladimirovich; SHVARTSMAN, S.M., red.; ZHITNIKOVA, O.S., tekhn. red.

[Manufacture of dust-gas-air lines and low-pressure pipelines for thermal electric power plants] Zavodskoe izgotovlenie pylegazovozdukhoprovodov i truboprovodov nizkogo davleniia dlia teplovykh elektrostantsii. Moskva, Gosenergoizdat, 1963. 386 p. (MIRA 16:7)

(Pipelines)
(Electric power plants--Equipment and supplies)

SHVARTSMAN, S.M., kand.tekhn.nauk, dotsent

Optimum distribution of heat sensitivity between the components of terminal heating surfaces of boiler units. Energomashinostroenie 9 no.6:5-11 Je '63. (MIRA 16:9)

SHVARTSMAN, S.M., kandidat meditsinskikh nauk.

Therapy of suppurative skin diseases with a penicillin and campolon mixture. Vest.ven.i derm. no.5:51 S-O '53. (MLRA 6:12)

1. Iz Leningradskogo kozhno-venerologicheskogo dispansera No.13.
(Skin--Diseases) (Penicillin)

Svartsman S.M.

F-6

USSR /Microbiology. Medical and Veterinary Microbiology.

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35768

Author : Volferts, G.A.; Shvartsman, S.M.

Title : The Pathogenity and Virulence of Cultures of Yeast-like Fungi, Isolated in Mycosis of the Lower Extremities

Orig Pub: V sb.:Eksperim. i klinich. issledovaniia II, L, Medgiz, 1956, 133-134

Abstract: Yeast-like fungi, screened from mycosis of the lower extremities and usually viewed as saprophytes can under definite conditions be converted into pathogenic. Suspensions of cells of Mycotoruloides and Geotrichoides, isolated from people with easy scaling in the inter-toe fold in the so-called worn off forms of mycosis of the lower extremities,

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USSR /Microbiology. Medical and Veterinary Microbiology. F-6

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35768

were injected into guinea pigs, rabbits and mice. Infection was obtained only in the guinea pigs with an intradermal injection of the culture and according to the method of Pak or Blokh. Four to five passages through the organism of the guinea pigs strengthened the virulence of the cultures -- it caused the death of the animal from sepsis both in intravenous and intraperitoneal injections.

Card 2/2

LIPSKAYA, M.I.; MAKOVER, R.G.; SHVARTSMAN, S.M., kand.med.nauk

Treating pustular skin diseases with a synthomycin emulsion. Vest.derm. i ven. 31 no.2:46 Mr-Ap '57. (MIRA 12:12)

1. Iz kozhno-venerologicheskogo dispansera No.13 Frunzenskogo rayona Leningrada.
(SKIN--DISEASES) (CHLOROMYCETIN)

SHVARTSMAN, S.M., kand.med.nauk; LIPSKAYA, M.I.

Preliminary results of dispensary treatment of epidermophytosis of the foot. Vest.derm. i ven. 33 no.3:42-44 My-Je '59. (MIRA 12:9)

1. Iz kozhno-venerologicheskogo dispansera No.13 Frunzenskogo rayona Leningrada (glavnyy vrach Z.S.Lisitsyna, konsul'tant - prof.Ye.S.Zalkind).

(RINGWORM, ther.
foot, ambulatory ther. (Rus))
(FOOT, dis.
ringworm, ambulatory ther. (Rus))

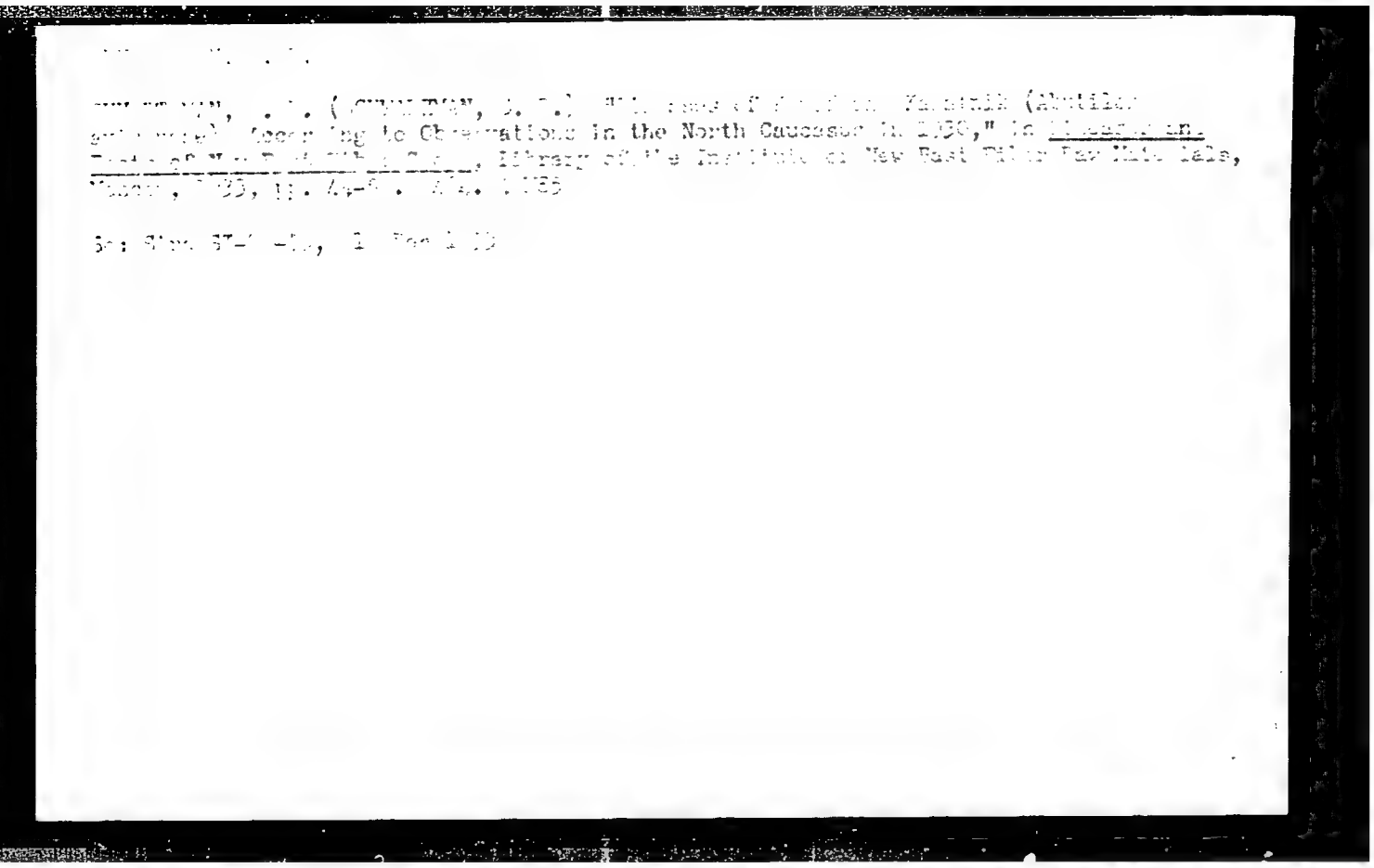
SHVARTSMAN, S.M., kand.med.nauk; KIPSKAYA, M.I.; IVANOVA, R.A.

Results of the prevention of epidermophytosis of the feet in swimming pools. Vest.derm.i ven. 35 no.1:66-68 Ja '61. (MIRA 14:3)

1. Iz kozhno-venerologicheskogo dispansera No.13 Frunzenskogo rayona Leningrada (glavnyy vrach Z.S.Lisitsyna, konsul'tant - doktor med.nauk O.K. Shaposhnikov).
(SWIMMING POOLS--HYGIENIC ASPECTS) (RINGWORM)
(FOOT--DISEASES)

SHVARTSMAN, S.M., inzh.-teplotekhnik, dotsent

Choice of the rate of flow of steam in designing the superheaters of boiler units. Energomashinostroenie 11 no.8:11-12 Ag '65. (MIRA 18:10)



CHVARTSIAN, S. K.

Agriculture

Fungoid diseases of trees of Kazakhstan and measures of controlling them. (Nauchno-populiarnaya seriya). Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1950.

Monthly List of Russian Accessions, Library of Congress, October 1952 . Unclassified.

1. [illegible], S.N.

2. USSR (600)

4. Fir - Diseases and Pests

7. New disease of the fir, induced by phoma abietallasibirica Schwarzman sp. nova. Bot.mat.Otd.spor.rast. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

SHVARTSMAN, S.R.

Fungus diseases of fir stands in East Kazakhstan Province.
Izv.AN Kazakh.SSR no.132:35-44 '54. (MLRA 7:5)
(East Kazakhstan Province--Fungi, Pathogenic)
(Fungi, Pathogenic--East Kazakhstan Province)
(Fir--Diseases and pests)

SHVARTSMAN, S.R.; LEONOVA, N.M.

Fungus diseases and mycorhiza of the main tree varieties of West Kazakhstan Province. Trudy Inst.bot.AN Kazakh SSR 1:146-176 '55. (MLRA 9:11)

(West Kazakhstan Province--Trees--Diseases and pests)
(Mycorhiza) (Fungi, Phytopatogenic)

SHVARTSMAN, S.R.

New pine disease in northern Kazakhstan. Trudy Inst.bot.AN Kazakh.SSR 2:3-115 '55. (MLRA 9:11)
(Kazakhstan--Pine--Diseases and pests)
(Fungi, Phytopathogenic)

NEVODOVSKIY, G.S.; SHVARTSMAN, S.K., kandidat biologicheskikh nauk, otvetstvennyy redaktor; SUVOROVA, R.I., redaktor; ALFEROVA, P.F., tekhnicheskiy redaktor

[Spore-bearing plants of Kazakhstan] Flora sporovykh rastenii Kazakhstana. Alma-Ata, Vol.1. [Rust fungi] Rzhavchinnye griby. 1956. 431 p. (MLRA 10:7)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut botaniki
(Kazakhstan--Uredinese)

SHVARTSMAN, S.R.; LEONOVA, N.M.; ANTIPOVA, G.N.

Parasitic and saprophytic mycoflora of white birch in northern Kazakhstan. Trudy Inst.bot.AN Kazakh.SSR 4:76-110 '56. (MLRA 10:2)
(Birch--Diseases and pests)
(Kazakhstan--Fungi, Phytopathogenic)

SHVARTSMAN, S.R.

Material on the Gasteromycetes of Kazakhstan. Trudy Inst.bot. AN Kazakh.SSR 7:227-267 '59. (MIRA 13:5)
(Kazakhstan--Gasteromycetes)

SHVARTSMAN, S.R.

New genus of ascomycetous fungi (fam. Stictidaceae) in the Tien Shan. Bot.mat.Otd.spor.rast. 12:224-228 Ja '59.
(MIRA 12:12)

(Terskey Ala-Tau--Ascomycetes)
(Trans-Ili Ala-Tau--Ascomycetes)

SHVARTSMAN, S.R.

Anthurus archeri (Berk.) Fischer, a rare gasteromycetous fungus in Kazakhstan. Bot.mat.Otd.spor.rast. 12:257-261 Ja '59. (MIRA 12:12)
(Chelkar region(Aktyubinsk Province)--Gasteromycetes)

SHVARTSMAN, Sof'ya Ruvinovna; SUVOROVA, R.I., red.; ALFEROVA, P.F., tekhn.red.

[The flora of sporeforming plants of Kazakhstan] Flora sporovykh rastenii Kazakhstana. Vol.2. [Smut fungi] Golovnevye griby. 1960. 367 p. (MIRA 14:2)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut botaniki.
(Kazakhstan--Smuts)

SHVARTSMAN, S.R.

Tertiary relicts among the gasteromycetes of Kazakhstan. Izv.AN Kazakh.SSR,Ser.bot.i pochv. no.1:3-14 '60. (MIRA 13:6)
(Kazakhstan--Gasteromycetes)

VASYAGINA, Mariya Pavlovna; KUZNETSOVA, Mariya Nikolayevna; PISAREVA, Nadezhda Fedorovna, SHVARTSMAN, Sof'ya Ruvinovna, kand. biolog. nauk; SUVOROVA, R.I., red.; SHEVCHUK, T.I., red.; ROROKINA, Z.P., tekhn. red.

[Flora of sporeforming plants of Kazakhstan] Flora sporovykh rastenii Kazakhstana. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR. Vol.3. [Mildew] Muchnisto-rosianye griby. 1961. 458 p. (MIRA 15:1)

(Kazakhstan--Mildew)

SHVARTSMAN, S.R.; KRAVTSEV, B.I. [deceased]

Fungus diseases of desert shrubs in Kazakhstan. Trudy Inst. bot. AN Kazakh. SSR 9:3-108 '61. (MIRA 14:3)
(Kazakhstan--Fungi, Phytopathogenic) (Shrubs--Diseases and pests)

SHVARTSMAN, S.R.

Effect of the conditions of root nutrition on the course of powdery mildew in wheat. Trudy Inst. bot. AN Kazakh. SSR 9:135-179 '61. (MIRA 14:3)
(Wheat--Diseases and pests) (Mildew) (Plants--Nutrition)

SHVARTSMAN, Sof'ya Rubinovna; SUVOROVA, R.I., red.; RODOKINA, Z.P., tekhn. red.

[Materials on the history of mycoflora of Kazakhstan (supplement to the 2d volume of "Flora of sporeforming plants of Kazakhstan Smut fungi", 1960)] Materialy k istorii mikoflory Kazakhstana (dopolnenie k II tomu "Flory sporovykh rastenii Kazakhstana. Golovnevye griby." S.R.Shvartsman, 1960). Alma-Ata, Izd-vo Akad. nauk Kazakhskoi SSR, 1962. 182 p. (MIRA 16:2)
(Kazakhstan—Smuts)

[illegible], B.F'ya Kuvinovna; IVANOVA, E.I., red.

[Sporebearing flora of Kazakhstan] Flora sporovykh rastenii kazakhstana. Alma-Ata, Izd-vo AN Kaz.SSR. Vol.4. [Heterobasidiomycetous (Auriculariales, Tremellales, Dacryomycetales) and autobasidiomycetous (Exobasidiales, Aphyllophorales) fungi] Geterobazidial'nye (Auriculariales, Tremellales, Dacryomycetales) i avtobazidial'nye (Exobasidiales, Aphyllophorales) griby. 1964. 713 p. (MIRA 17:7)

SHVARTSMAN, S.R.

Development of mycology and phytopathology in the Kazakh S.S.R.
Trudy VIZR no.23:296-303 '64. (MIRA 19:2)

SHVARTSMAN, S.Ya.; TARUSHKINA, G.A.; SAMOKHINA, N.M.

Heroes of socialist labor rank first in production. Tekst.prom. 20 no.7:55-59 Jl '60. (MIRA 13:7)

1. Predsedatel' fabrichnogo komiteta profsoyuza tekstil'shchikov. (Textile workers)

SHVARTSMAN, S.Ya.

Treatment using neuroplegic preparations of patients suffering from late schizophrenia. Trudy Gos.nauch.-issl.inst.psikh. 27:183-190 '61. (MIRA 15:10)

1. Moskovskaya gorodskaya psikhiatricheskaya bol'nitsa No.5. Glavnyy vrach - kand.med.nauk Yu.B.Rozinskiy. Nauchnyy rukovoditel'- prof. I.G.Ravkin.
(SCHIZOPHRENIA) (AUTONOMIC DRUGS)

RYABKO, Kh.G.; SHVARTSMAN, S.Ye.; SHUL'MAN, S.L.; TOCHENYY, P.A., red.; UMANETS, V.K., tekhn.red.

[Machine-tool units] Zavod malykh agregatnykh stankov. Agregatnye stanki. Khar'kov, Khar'kovskoe obl.izd-vo, 1958. 39 p. (MIRA 13:1)

(Machine tools)

PHASE I BOOK EXPLOITATION SOV/5452

Donskoy, Ya. Ye., G.I. Kardash, and I.P. Lyalyuk, eds.

Mekhanizatsiya i avtomatizatsiya sbornik statey ob opyte vnedreniya mekhanizatsii i avtomatizatsii na khar'kovskikh mashinostroitel'nykh zavodakh (Mechanization and Automation; Collection of Articles on the Introduction of Mechanization and Automation in Khar'kov Machinery-Manufacturing Plants) (Khar'kov) Khar'kovskoye knizhnoye izd-vo, 1960. 373 p. 3,500 copies printed.

Editorial Board: S.A. Vorob'yev, Candidate of Technical Sciences; Chairman of the Editorial Board: P.I. Zaets, Engineer; A.A. Kurlov, Engineer, V.I. Kuznetsov, Engineer; A. Ye. Lenov, Docent, A.V. Tupitsyn, Candidate of Technical Sciences, and S.M. Khmara, Candidate of Technical Sciences; Eds.: Ya. Ye. Donskoy, G.I. Kardash, and I.P. Lyalyuk; Tech. Ed.: M.I. Limanova.

PURPOSE: This collection of articles is intended for technical and scientific personnel, outstanding workers, and shock workers of communist labor.

COVERAGE: The multifaceted experience of Khar'kov enterprises in the mechanization, automation, and improvement of manufacturing processes is generalized. The development of new machines, instruments, and promotion methods is considered and attention is given to newly established enterprises, and to the introduction of telemechanics in the Khar'kov GAS-system management. By including concrete examples and facts, the authors of the various articles attempt to demonstrate the achievements of the Khar'kov Industrial complex in fulfilling the resolutions of the June (1959) and July (1960) Plenums of the Central Committee of the Communist Party of the Soviet Union. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

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SHVARTSMAN, V.A.

89-10-22/36

AUTHORS: Osipov, A.I., Shvartsman, V.A., Alekseyev, V.I., Surov, V. F. Sazonov, M. ., Bulskiy, M.T., Telesov, S.A., Skrebtsov, A.M., Ofengenden, A.M., Gol'dshteyn, L. G., Sviridenko, F. F.

TITLE: The use of Radio Isotopes when Investigating the Kinetics of Scrap Fusion and Slag Formation in the Scrap-Ore Process. (Primeneniye radioaktivnykh isotopov dlya izucheniya kinetiki plavleniya skrapa i shlakoobrazovaniya pri skrap-rudnom protsesse)

PERIODICAL: Atomnaya Energiya, 1957, Vol. 3, Nr 1o, pp. 352-355 (USSR)

ABSTRACT: 1) Investigation of the kinetics of scrap fusion.
The fusion velocity in the 13o and 35o ton open hearth furnaces is shown on the basis of the reduction of the specific activity of standard metal samples (4oo g), which contain Co-6o with the help of 12 counting tubes of the MC-4 type.
From the dependence obtained between the molten scrap quantity and the time which as elapsed since introduction of the scrap, it follows that nearly 1oo% of the scrap is molten already after about 2oo minutes.
2) Investigation of the kinetics of slag formation.
CaO, in which Ca-45 was included, was used for this investigation. The CaO is introduced into the liquid slag in closed metallic tubes and standard samples for measuring are taken out only after a lapse of time of 3o-35 minutes. As measurement for the velocity in which Ca dissolves in the slag, the relation

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The Use of Radio Isotopes When Investigating the Kinetics of Scrap Fusion andSlag Formation in the Scrap-Ore Process. 89-10-22/36

$\frac{dx}{dt} = K_{SCH} (100 - x)^{2/3}$ was experimentally confirmed.

x here denotes the weight of the CaO already dissolved and K_{SCH} i the proportionality coefficient for slag formation. There are 4 figures and 2 Slavic references.

SUBMITTED January 15, 1957
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Card 2/2

SHVARTSMAN, V.F.

KOROLEV, A.A., kandidat tekhnicheskikh nauk; KOGOS, A.M.; TOKARSKIY, A.P., NOSAL', V.V. GUREVICH, A.Ye., SHVARTSMAN, V.F.; KARPOV, V.F.; SHUL'MAN, P.G.; ADAMOVICH, N.K.; CHETYREOK, F.M.; TSELIKOV, A.I., KUZ'MIN, A.D., kandidat tekhnicheskikh nauk; TIKHONOV, A.Ya., tekhnicheskiy redaktor.

[Blooming mill 1000] Bliuming 1000. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1955. 271 p. (MLRA 8:8)

1. Chlen-korrespondent AN SSSR (for TSelikov)
(Rolling mills)

[illegible], . V.

USSR/Radar Equipment
Cables, Electric

Jan 1947

"Radar Method of Determining Breaks in Communication Lines," V. N. Kuleshov, Candidate in Technical Sciences, V. O. Shvartsman, Engr , 2½ pp

"Vestnik Svyazi - Elektrosvyaz'" No 1 (82)

Describes the operation of the "reflectometer" which uses a radar principle of determining the point of break in a communication cable. It works on the principle that a break will return a certain volume of the impulse sent over the line, and the strength of the impulse will determine the approximate location of the break. Photograph of the apparatus and some diagrams showing oscillograph recordings of the apparatus.

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